Garbage 101

Let's talk trash. One of the things that we probably do every day is throw away garbage. The act is so common that it doesn't even register. We've all heard the cliché: "Out of sight, out of mind." Well, even when garbage is in sight, it seemingly passes under our eyes virtually unnoticed. But it's there. Then it's gone.

How much garbage do we make?

That question is not as simple to answer as it would seem. Just think of all the different sources – or generators - of garbage. You make garbage, right? And your family makes garbage. And schools, businesses, organizations and industry make garbage. Everybody makes garbage. And everybody makes different kinds of garbage.

Before reading any further, here's a term you need to know. What you call trash or garbage, professionals call **solid waste**. There are different kinds of solid waste, but one type measured nationwide by the U.S. Environmental Protection Agency (U.S. EPA) and in South Carolina is municipal solid waste (MSW).

What is MSW? MSW has many definitions throughout the nation. In South Carolina, however, MSW is defined as the combined residential, commercial, institutional/non-profit and industrial packaging/office waste generated. This includes paper, cans, bottles, food scraps, yard trimmings, packaging and other items. It does not include industrial process waste like scraps and by-products from the manufacturing process, construction and demolition (C&D) debris, automobile bodies, agricultural waste, combustion ash, mining waste and sewage sludge as well as hazardous, infectious and radioactive waste.

According to the S.C. Solid Waste Policy and Management Act of 1991 (Act), county governments are required to report annually to the S.C. Department of Health and Environmental Control (DHEC) the amount of MSW recycled within their county. Permitted solid waste facilities also are

required to report the amount of waste disposed of at their facilities annually to DHEC.

And the number is ...

So, how much MSW did we make? South Carolinians generated more than 4.67 million tons of MSW in fiscal year (FY) 2005 (July 1, 2004 - June 30, 2005) according to the S.C. Solid Waste Management Annual Report for FY 2005. How do we compare nationally? The amount of MSW generated in (calendar year) 2003 (the latest numbers available) nationwide was 236 million tons according to the U.S. EPA.

How much MSW do we dispose of every day? South Carolinians disposed of 4.5 pounds of MSW per person per day (p/p/d) in FY 2005. By comparison, nationwide Americans discarded about 3 p/p/d in 2003 according to the U.S. EPA.

Where does the garbage (MSW) go?

Of the 4.67 million tons of MSW generated in South Carolina in FY 2005, more than 1.2 million tons or about 26 percent of the state's total MSW stream was recycled. Of the remaining amount, 3.4 million tons of MSW or about 68.9 percent was disposed of in the state's 18 MSW landfills while 227,031 tons or about 4.9 percent was sent to the state's only MSW incinerator, which is located in Charleston County.

There are other places garbage may go before being disposed of in a landfill, sent to an incinerator or recycled. Some garbage is taken to a **transfer station** where it is compacted and loaded on large trailers. This is done usually when the community is a long distance from a landfill. Some garbage is taken to a materials recovery facility (MRF and pronounced "Murf") where recyclables are sorted from the garbage. The recyclables are taken to companies who process the materials and make them into new products while the garbage goes to a MSW landfill or MSW incinerator.

How does the garbage get to where it's going?

Usually, it is taken by a garbage truck. But garbage can be moved by barge and by rail.

What's in our garbage?

The U.S. EPA calculates – by weight – what makes up the nation's MSW stream. In 2003, of the total MSW generated before recycling, paper and paperboard (which includes office paper, newspaper and cardboard boxes) was the largest category, comprising 35.2 percent or 83.1 million tons. Yard trimmings were second (12.1 percent or 28.6 million tons) followed by food scraps (11.7 percent or 27.6 million tons), plastic (11.3 percent or 26.7 million tons) and metal (including aluminum cans and steel cans – 8.0 percent or 18.8 million tons). Rubber, leather and textiles (7.4 percent or 17.4 million tons). wood (5.8 percent or 13.6 million tons) and glass (5.3 percent or 12.5 million tons) rounded out the top eight categories. The remaining amount (3.4 percent or 7.94 million tons) was classified as Other.

South Carolina measures the total MSW generated and how much was recycled, but not the total amount of a specific waste. To roughly figure out what specific category of material is being thrown away in South Carolina, we can use the national percentages determined by the U.S. EPA. There were 4.67 million tons of MSW generated before recycling in South Carolina in FY 2005. That means that by using the U.S. EPA's figure of 35.2 percent of the total MSW generated being paper and paperboard products, South Carolinians generated an estimated 1.64

million tons of paper and paperboard products in its MSW waste stream. Remember, it's only an estimate, but the numbers can be used as a guide.

Other estimates of what we generated before recycling in South Carolina include yard trimmings (560,400 tons), food waste (546,390 tons) plastic (527,710 tons) metal (373,600 tons) and glass (247,510 tons). Again, these are estimates based on the U.S. EPA's national averages.

Think before you throw ...

Of all the environmental issues we face, garbage is one we can do something about. The choices we make everyday affect not only the amount but also the type of waste we throw away.

You know the three Rs. Waste reduction, which is making less garbage in the first place, is the most preferred option of waste management. Reduction is followed by reuse, which means repairing items, donating them to a charity or selling them. Reuse is followed by recycling and composting, which is the process of turning materials that otherwise would become a waste into valuable new resources.

Disposing of garbage at a landfill or burning it at an incinerator should be the last option for waste management. To learn more about garbage and ways you can reduce the amount you generate at home, at school, or at work, or more about recycling, composting and buying recycled, visit DHEC's Office of Solid Waste Reduction and Recycling Web site at www.scdhec.gov/recycle or call 1-800-768-7348.





Office of Solid Waste Reduction & Recycling 1-800-768-7348 ● www.scdhec.gov/recycle

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